

**REGULATION OF TARGET PROTEIN ACTIVITY  
THROUGH MODIFIER PROTEINS**

Abstract of the Disclosure

The present invention is based on the discovery that a polypeptide containing the JAB subunit or the JAM domain has peptidase activity, e.g., isopeptidase activity. The present invention provides polypeptides and crystalline polypeptides containing the JAM domain and methods of using such polypeptides to screen for agents capable of affecting the peptidase activity of the polypeptides. The present invention also provides methods of using the JAM domain for rational drug design or identifying agents capable of affecting the peptidase activity of the JAM domain.